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**CONTRIBUTED PAPER SUBMITTAL**

<b>XXIV ICRC</b>  Roma, Italy August 28-September 9, 1995	<b>TITLE OF CONTRIBUTED PAPER</b> <u>Alfvén Waves in the Polar Heliosphere: Ulysses Observations</u>
	<b>PRESENTING AUTHOR</b> <u>E. J. Smith</u>
	<b>INSTITUTION:</b> <u>Jet Propulsion Laboratory</u>
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	<b>KEY WORDS</b> <u>polar heliosphere, Cosmic rays, Alfvén waves</u>
	<b>SESSION CODE</b> (see tentative classification code) <u>SH6: Modulation</u>
	Preferred presentation : <input checked="" type="checkbox"/> oral <input type="checkbox"/> poster
	please indicate support needed : slides <input type="checkbox"/> transparencies <input checked="" type="checkbox"/> audio visual <input type="checkbox"/>
	<p align="center">Abstract (type roughly 100 words)</p> <p>One of the characteristic features of the polar heliosphere discovered by Ulysses is the continuous presence of large amplitude, long-period variations in the direction of the magnetic field. Correlation of the field changes with simultaneous perturbations in the solar wind velocity show that they are associated with outward-propagating Alfvén waves. Their periods and wavelengths extend to &gt;10 hours and &gt;0.3 AU with <math>\Delta B/B \approx 1</math> and the waves are strongly affecting the access of galactic cosmic rays to the polar region. Recent observations by Ulysses as it returned to the solar equator and traversed the north hemisphere have separated the radial and latitudinal dependence of the wave power and other properties.</p>
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